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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,615	07/24/2001	Brian Berkowitz	40062.93US01	5453

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EXAMINER

SONG, JASMINE

ART UNIT	PAPER NUMBER
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2188

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,615

Applicant(s)

BERKOWITZ ET AL.

Examiner

Jasmine Song

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-30 and 32-54 is/are rejected.
- 7) ☒ Claim(s) 13 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

Detailed Action

1. The instant application having Serial No. 09/912615, has a total of 54 claims pending in the application, there are 9 independent claims and 45 dependent claims, all of which are ready for examination by the examiner.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 02/15/2002 have been considered by the examiner.

Oath/Declaration

4. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. 1.63.

Drawings

5. The drawings filed on 07/24/2001 has been approved by the examiner.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-12,14-30 and 32-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Bolosky., US 6513051 B1

The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Bolosky teaches that a computer-readable medium having computer-executable components, comprising:

a writer (described in the Spec. 5, lines 22-25 is taught as in the col.19, lines 24-26, in this case, the Examiner considered a dynamic link library DLL as a writer) configured to create a writer metadata file (Fig.2B, data structure 124, col.19, lines 10-

13 and 24-26), the writer being associated with a plurality of components (common store file 68 as shown in the Fig.2B) stored on a volume of a computing system (Fig.2B, file system volume 80), the writer metadata file including an identifier of the writer (col.6, lines 61-64 and col.19, lines 24-26) and a description of which of the plurality of components are to be included in a backup operation of the volume (col.6, lines 3-7; col.9, lines 59-63 and col.14, lines 3-5 and col.19, lines 35-37);

a requestor (described in the Spec. 5, lines 22-25 is taught as the backup application in Fig.2B) configured to read the writer metadata file to identify the components to be included in the backup operation (col.13, lines 35-39 and col.14, lines 4-7) and to interface with a service (described in the Spec. 5, lines 22-25 is taught as SIS facility 62 as shown in Fig.2B) configured to create an image of the volume at an instant in time (Fig.2B, element 80 including the common store directory), the requestor being further configured to backup the identified components from the image of the volume (col.13, lines 35-39) to a backup medium (backup storage medium 122).

Regarding claim 2, Bolosky teaches that wherein the requestor (described in the Spec. 5, lines 22-25 is taught as the backup application in Fig.2B) is further configured to create a backup components file (common store file, col.15, lines 57-58) describing a set of components (more than one common store file, col.15, lines 57-59) that are to be included in a backup operation managed by the requestor (backup application 118), and wherein the requestor is further configured to provide the backup components file to the writer for modification (col.15, lines 60-61 and lines 65-67).

Regarding claim 3, Bolosky teaches that wherein the writer metadata file further comprises a listing of files within the plurality of components that are intended to be excluded from the backup operation of the volume (col.18, lines 67 to col.19, lines 3, it is taught as the backup application 118 **selects** a file and backup the file by writing the file to the backup storage medium 122).

Regarding claim 38, Bolosky teaches that a computer-implemented method for restoring data backed up from a computer-readable medium during a backup operation (Fig.2B), the method comprising:

receiving a notification (it is taught as the SisCreateRestoreStructure function is called, col.16, lines 24-40) that a restore operation of the data is commencing (col.16, lines 24 to col.18, lines 51);

retrieving information that describes a group of resources that were included in the backup operation (col.16, lines 44-49 and col.17, lines 47-64);

restoring the group of resources in accordance with the retrieved information (col.17, lines 65-66).

Regarding claim 39, Bolosky teaches that wherein the retrieved information includes a backup components file (common store file, col.15, lines 57-58) that describes the data backed up from the computer-readable medium during the backup operation (col.15, lines 57-61).

Regarding claim 40, Bolosky teaches that wherein the retrieved information includes a writer metadata file (Fig.2B, data structure 124, col.19, lines 10-13 and 24-26) that describes the group of resources (the common store files).

Regarding claims 4 and 41, Bolosky teaches that wherein the writer metadata file further comprises an identification (the identifier of the common store file, col.20, lines 34-38) of a restore technique to be applied to the backed up Components (common store file, col.15, lines 57-58 and col.19, lines 24-26) during a restore operation.

Regarding claims 5 and 42, Bolosky teaches that wherein the restore technique comprises restoring the backed up components if those components are not already at a restore location for the components (col.20, lines 59-61).

Regarding claims 6 and 43, Bolosky teaches that wherein the restore technique comprises replacing components already at a restore location with the backed up components if those components can be replaced (col.16, lines 47-49).

Regarding claims 7 and 44, Bolosky teaches that wherein the restore technique comprises stopping a service prior to restoring the backed up components (col.20, lines 15-21 and Fig.14A, steps 1404-1406).

Regarding claims 8 and 45, Bolosky teaches that wherein the restore technique further comprises restarting the service after restoring the backed up components (Fig.14A, steps 1402-1412).

Regarding claims 9 and 46, Bolosky teaches that wherein the restore technique comprises restoring the backed up components to a location other than the location from which the components were backed up (col.17, lines 39-43).

Regarding claims 10 and 47, Bolosky teaches that wherein the restore technique comprises causing the backed up components to be restored during a subsequent system reboot (Fig.1).

Regarding claim 11, Bolosky teaches that wherein the requestor is further configured to perform a restore operation of the backed up components by applying the restore technique to the backed up components during the restore operation (col.16, lines 24 to col.18, lines 51 and col.20, lines 6 to col.21, lines 30).

Regarding claims 12 and 30, Bolosky teaches that a computer-implemented method for backup data stored on a computer-readable medium, the method comprising:

initiating a backup operation (col.14, lines 21-36);

causing a writer (described in the Spec. 5, lines 22-25 is taught as in the col.19, lines 24-26, in this case, the Examiner considered a dynamic link library DLL as a writer) associated with an application (backup application 118 in Fig.2b), the application being associated with a plurality of components (common store file 68 as shown in the Fig.2B), each component describing one or more files (col.5, lines 44-47), to create and make available a metadata file (Fig.2B, data structure 124, col.19, lines 10-13 and 24-26) identifying which of the plurality of components are selected for inclusion in the backup operation (col.6, lines 3-7; col.9, lines 59-63 and col.14, lines 3-5 and col.19, lines 35-37);

reading the metadata file to identify the selected components (col.13, lines 35-39 and col.14, lines 4-7); and

performing the backup operation on the identified components col.13, lines 35-39).

Regarding claims 14 and 32, Bolosky teaches wherein the metadata file further comprises an identification of a file associated with the application and selected for exclusion from the backup operation (col.18, lines 67 to col.19, lines 3, it is taught as the backup application 118 **selects** a file and backup the file by writing the file to the backup storage medium 122).

Regarding claims 15 and 33, Bolosky teaches wherein performing the backup operation includes excluding from the backup operation the file selected for exclusion

(col.18, lines 67 to col.19, lines 3, it is taught as the backup application 118 selects a file and **backup** the file by writing the file to the backup storage medium 122)..

Regarding claims 16 and 34, Bolosky teaches wherein the metadata file further comprises instructions related to a restore technique (col.16, SisCreateRestoreStructure) to be applied to one or more of the identified components (common store files that were returned as a result of calling SisRestoredLink, col.17, lines 60-64) during a restore operation.

Regarding claims 17 and 35, Bolosky teaches further comprising performing a restore operation of the identified components (common store files that were returned as a result of calling SisRestoredLink, col.17, lines 60-64) in accordance with the restore technique identified in the metadata file (col.20, lines 34-39).

Regarding claims 18 and 36, Bolosky teaches wherein performing the backup operation comprises causing an image of the selected components to be taken, the image reflected a quiescent state of the selected components at an instant in time (Fig.2B, col.5, lines 43 to col.6, lines 51).

Regarding claims 19 and 37, Bolosky teaches wherein the image comprises a snapshot of a volume on which is stored the selected components (col.6, lines 32-51).

Regarding claims 20 and 48, Bolosky teaches that a computer-readable medium having stored thereon a data structure (Fig.2b, data structure 124), comprising:

a first data field describing a writer (described in the Spec. 5, lines 22-25 is taught as in the col.19, lines 24-26, in this case, the Examiner considered a dynamic link library DLL as a writer), the writer being associated with an application (backup application 118 in Fig.2b), the application having an associated plurality of files(common store file 68 as shown in the Fig.2B); and

a second data field describing a first set of files in the plurality of files for inclusion in a backup operation performed by a common backup application (col.6, lines 3-7; col.9, lines 59-63 and col.14, lines 3-5 and col.19, lines 35-37).

wherein the common backup application is configured to read the data structure and perform the backup operation on the first set of files described in the second data field (col.18, lines 64 to col.19, lines 3).

Regarding claim 21, Bolosky teaches that wherein the data structure further comprises a third data field describing a second set of files in the plurality of files for exclusion from the backup operation and wherein the common backup application is further configured to perform the backup operation by excluding the second set of files (col. 18, lines 64 to col.19, lines 3).

Regarding claim 22, Bolosky teaches that wherein the data structure further comprises a fourth data field describing a restore technique to be applied to the first set

of files during a restore operation (col.16, lines 44-49 and col.17, lines 40-43) and wherein the common backup application is further configured to apply the restore technique to the first set of files during the restore operation (col.17, lines 61-64).

Regarding claim 23, Bolosky teaches that a computer-readable medium having stored thereon a data structure (Fig.2b, data structure 124), comprising an identification (the identifier of the common store file) of a set of files (the common store file) to be included in a backup operation (col.19, lines 24-26) performed by a common backup application (fig.2B, the backup application 118), the data structure being created by the common backup application during one phase of the backup operation (col.19, lines 24-26), the data structure being made available to a writer (described in the Spec. 5, lines 22-25 is taught as in the col.19, lines 24-26, in this case, the Examiner considered a dynamic link library DLL as a writer) for modification, the writer being configured to annotate the data structure with information related to operations to be performed after the backup operation (col.6, lines 3-7; col.9, lines 59-63 and col.14, lines 3-5 and col.19, lines 35-37).

Regarding claim 24, Bolosky teaches that a computer-implemented method for backing up data stored on a computer-readable medium, the method comprising:

receiving a notification (it is taught as SisCreateBackupStructure function call) from a backup program that a backup operation is commencing (col.14, lines 34-36);

in response to the notification, preparing a writer metadata file (Fig.2B, data structure 124) that describes a group of resources associated with an application, the group of resources being intend for backup (col. 19, lines 23-26):

making the writer metadata file available to the backup program (col.19, lines 35-38); and

in response to a notification that the backup operation has concluded (it is taught as the backup is completed, fig.13A, step 1314 and col.19, lines 65), performing a post-backup operation (col. 19, lines 66 to col.20, lines 3, it is taught as deallocate the backup data structure).

Regarding claim 25, Bolosky teaches that further comprising:

reviewing a backup components file (common store file 68) prepared by the backup program (backup application 118), the backup components file describing the backup operation being performed (col.19, lines 22-32); and

modifying the backup components file to include additional information (col.19,lines 43-47) associated with the application.

Regarding claim 26, Bolosky teaches that wherein the additional information comprises an indication to perform a procedure at the conclusion of the backup operation (col. 19, lines 66 to col.20, lines 3, it is taught as deallocate the backup data structure).

Regarding claim 27, Bolosky teaches that further comprising, prior to performing the backup operation, in response to receiving a notice that an image is being created of the group of resources intended for backup, temporarily ceasing access to the group of resources (col.20, lines 15-21 and Fig.14A, steps 1404-1406).

Regarding claim 28, Bolosky teaches that wherein the image comprises a snapshot of the computer-readable medium (col.6, lines 32-51).

Regarding claim 29, Bolosky teaches that wherein the writer metadata file further describes a second group of resources associated with the application, the second group of resources not being intended for backup (col.18, lines 67 to col.19, lines 3, it is taught as the backup application 118 **selects** a file and backup the file by writing the file to the backup storage medium 122).

Regarding claim 49, Bolosky teaches that the object comprises a component is taught as the common store file as shown in Fig.2B.

Regarding claim 50, Bolosky teaches that a computer-implemented method for backing up data stored on a computer-readable medium, the method comprising:

performing a backup operation (Fig.2B, col.19,lines 10-66) by making a backup copy of resources stored on the computer-readable medium (col.13, lines 35-39), the resources being associated with an application (the backup application 118); and

notifying the application of the resources that were successfully backed up during the backup operation (col.19, lines 35 to col.20, lines 5).

Regarding claim 51, Bolosky teaches that wherein notifying the application of the resources includes making a document (it is taught as adding the common store file identifier to its data structure, col.19, lines 43-45) available to the application, the document including an identification of resources that were successfully backed up during the backup operation (col.19, lines 45-59 and Fig.13A, step 1310 to 1312).

Regarding claim 52, Bolosky teaches that wherein the document comprises a backup components file (col.19, lines 44).

Regarding claim 53, Bolosky teaches that wherein the document is passed to the application at the completion of the backup operation (Fig.13B).

Regarding claim 54, Bolosky teaches that further comprising:
performing a restore operation of the resources that were successfully backed up during the backup operation (col.20, lines 6-26); and
making the document (it is taught as adding the common store file identifier to its data structure, col.20, lines 54-56) available to the application, thereby enabling the application to perform post-processing on the resources that are restored (it is taught as deallocating restore data structure as shown in Fig.14A, step 1416).

Allowable Subject Matter

8. Claims 13 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bradshaw et al.,	US 2001/0037475 A1
Burke	US 6185663
Howard et al	US 2002/0078315 A1
Pongracz et al.,	US 6003044
Franklin	US 6061770
Brown	US 6101585
Grummon et al	US 6341341 B1

10. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. 1.111 (c).

11. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine Song whose telephone number is 703-305-7701. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 703-306-2903. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Jasmine Song

Patent Examiner

March 18, 2004



Mano Padmanabhan
3/19/04

Mano Padmanabhan

Supervisory Patent Examiner

Technology Center 2100